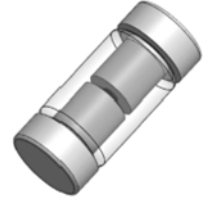


Features

- Low leakage current
- Schottky barrier diodes
- Low forward voltage drop
- For general purpose applications
- Moisture sensitivity: level 1, per J-STD-020
- For fast switching and low logic level applications
- High temperature soldering guaranteed: 260°C/10 seconds



SOD-80 (MINI MELF)

Applications

- HF-Detector, protection circuit
- DC/DC converter for notebooks
- Small battery charger, power supplies

Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	BAS85	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	30	V
Forward Continuous Current	I _F	200	mA
Repetitive Peak Forward Current at t _p < 1s, δ < 0.5	I _{FRM}	300	mA
Power Dissipation (Infinite Heatsink)	P _{tot}	200	mW
Surge Forward Current at t _p < 1s	I _{FSM}	600	mA
Thermal Resistance, Junction to Ambient	R _{θJA}	300	°C/W
Maximum Junction Temperature	T _J	125	°C
Storage Temperature Range	T _{STG}	-65 to +150	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Typ	Max	Unit
Maximum Forward Voltage Pulse Test t _p < 300us, δ < 2%	V _F	I _F =0.1mA	-	0.24	V
		I _F =1mA	-	0.32	
		I _F =10mA	-	0.40	
		I _F =30mA	0.50	-	
		I _F =100mA	-	0.80	
Maximum Leakage Current, Pulse Test t _p < 300us, δ < 2%	I _R	V _R =25V	0.2	2	uA
Junction Capacitance	C _{tot}	1V, 1MHZ	12	-	pF
Reverse Recovery Time	t _{rr}	I _F =I _R =10mA to I _R =1mA	-	5	nS

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

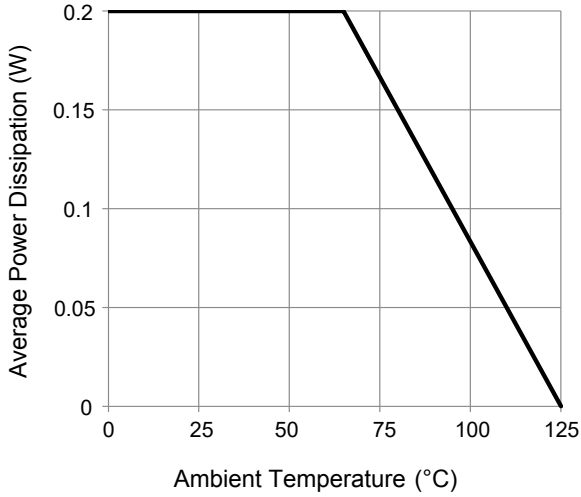


Figure 1. Power Derating Curve

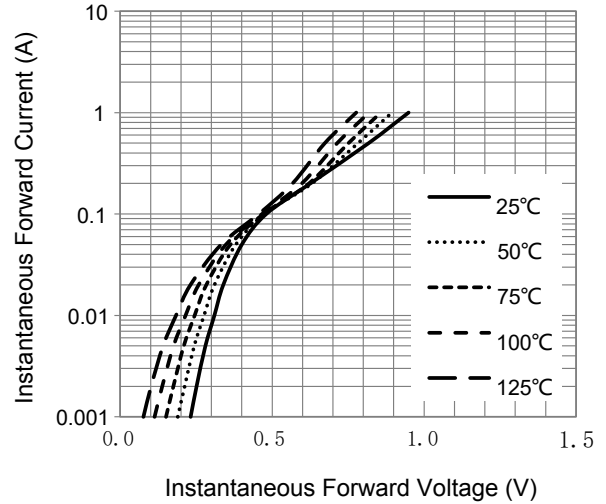


Figure 2. Typical Forward Voltage Characteristics

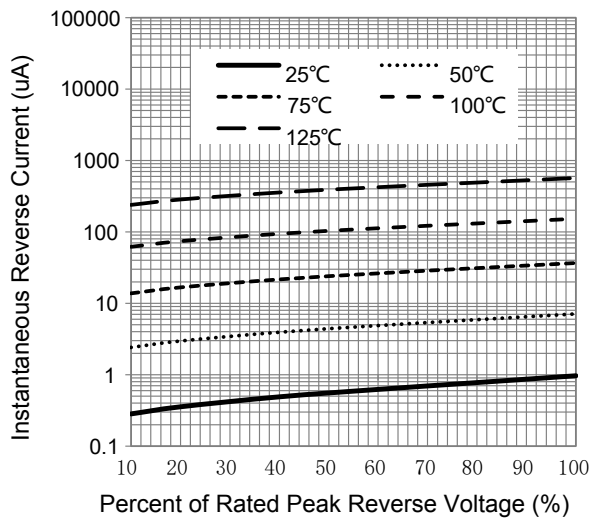


Figure 3. Typical Reverse Current Characteristics

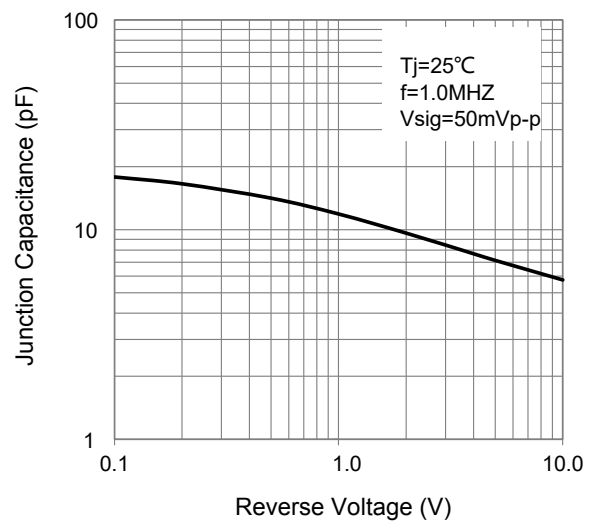
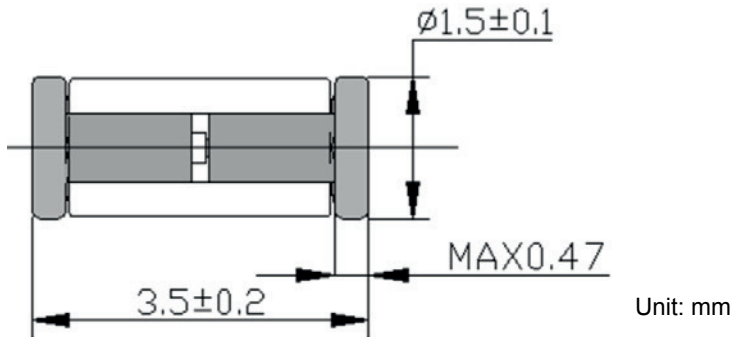


Figure 4. Typical Junction Capacitance

Package Outline Dimensions SOD-80 (MINI MELF)



Order Information

Device	Package	Marking	Carrier	Quantity
BAS85	SOD-80 (MINI MELF)	Cathode line	Tape & Reel	2,500pcs / Reel